

REMARKS

Claims 1-14 have been examined. Claims 1, 3/1, 6 and 9/6 have been rejected under 35 U.S.C. § 102(b), and claims 7, 9/7, 8 and 9/8 have been rejected under 35 U.S.C. § 103(a). Also, the Examiner has indicated that claims 2 and 3/2 contain allowable subject matter.

I. Preliminary Matters

The Examiner has objected to the Abstract as containing more than 150 words. Accordingly, Applicant has amended the Abstract in a manner believed to overcome the objection.

The Examiner has objected to the title as not being indicative of the invention to which the claims are directed. Accordingly, Applicant has rewritten the title in a manner believed to overcome the objection. Applicant submits that the title should not be construed to limit the scope of the claims.

The Examiner has objected to the specification due to an informality. Accordingly, Applicant has amended the specification to correct the minor error cited by the Examiner, as well as a minor error found by the Applicant.

Also, the Examiner has objected to claims 4, 5 and 10-14 as being in improper multiple dependent form. Accordingly, the Examiner has not examined claims 4, 5 and 10-14 on the merits. However, in view of amendments to the dependency of such claims, Applicant submits that claims 4, 5 and 10-14 are patentable at least by virtue of their dependency on either claim 1 or claim 6.

Further, the Examiner has objected to claims 1 and 7 due to minor informalities. Accordingly, Applicant has amended the claims in a manner believed to overcome the objections.

II. Allowable Subject Matter

As stated above, the Examiner has indicated that claims 2 and 3/2 contain allowable subject matter.

III. Rejections under 35 U.S.C. § 102(b) in view of JP 2001-134074 to Miyazawa et al. (“Miyazawa”)

The Examiner has rejected claims 1 and 3/1 under 35 U.S.C. § 102(b) as allegedly being anticipated by Miyazawa.

A. Claim 1

Applicant submits that claim 1 is patentable over the cited references. For example, claim 1 recites that, “a rotary driving motor control means which controls said rotary driving motor for the rotation of said rotary during the non-image forming operation such that the rotational speed of said rotary in a contact region where said input gear collides with said development unit driving gear is lower than the rotational speed of said rotary in a region other than said contact region.”

As set forth in the non-limiting embodiment on pg. 12, line 11 to pg. 13, line 20 of the present Application, due to the rotary driving controller, the impact when the input gear collides

with the development unit driving gear, during the rotation of the rotary in the non-image forming operation, can be absorbed. The impact is absorbed without the use of an impact absorbing member provided at the development unit driving gear side. Thus, the structure of the development unit driving gear side is simplified.

In Miyazawa, the rotation of the rotary 3 is stopped when a development roller 4a reaches a development position during the rotation of the rotary 3 in an image forming operation. After the stop of the rotary 3, a hook 28 is disengaged from a locking projection 2a so that a development device 4 is rocked clockwise relative to the rotary 3. The rocking of the development device 4 is absorbed by a spring 3 and a damper 24, so that the development roller 4a of the development device 4 slowly abuts on a photoreceptor 8. Miyazawa, however, does not disclose the control of a rotation of the rotary 3 in a non-image forming operation, where the image forming operation is *not* conducted, as recited in claim 1.

Also, the Examiner specifically refers to paragraphs [0021]-[0022] of Miyazawa as disclosing the control of the rotary driving motor. However, in addition to the above mentioned deficiency of Miyazawa, the cited portion merely discloses that the rotary driving force means 10, which includes a rotary drive gear 10a, a rotary drive middle gear 10b, and a rotary gear 10c, is used to slow down the driving force of a stepping motor 9, such that the rotary 3 can be slowed down (para. [0021]). However, such disclosure fails to teach or suggest that the gears 10a, 10b and 10c only slow down the rotational speed of the rotary 3 in a contact region, where the development counter drive motor gear 14 (i.e., alleged input gear) and the development counter drive gear 15 (i.e., alleged development unit driving gear) collide with each other.

Accordingly, Applicant submits that claim 1 is patentable over the cited reference and respectfully requests the Examiner to reconsider and withdraw the rejection.

B. Claim 3/1

Since claim 3/1 is dependent upon claim 1, Applicant submits that such claim is patentable at least by virtue of its dependency.

IV. Rejections under 35 U.S.C. § 102(b) in view of JP 10-142886 to Nukui (“Nukui”)

The Examiner has rejected claims 6 and 9/6 under 35 U.S.C. § 102(b) as allegedly being anticipated by Nukui.

A. Claim 6

Applicant submits that claim 6 is patentable over the cited reference. For example, claim 6 recites that, “said locking means comprises a lockable position formed on said rotary side, a locking member which is movably disposed on the body of the image forming apparatus and has a locking position where the locking member is engaged with said lockable position to lock said rotary and an evacuation position where the locking member is not engaged with said lockable position, a shifting means for shifting said locking member to said evacuation position, and a biasing means for biasing said locking member to said locking position, and said locking member has a contact portion which can come in contact with said lockable position before the engagement with said lockable position according to the rotation of said rotary.”

As set forth in the non-limiting embodiment on pg. 16, line 16 to pg. 17, line 2 of the present Application, the time required to obtain multi-color toner images, by changing colors, can be shortened so as to improve the image forming speed. This is because the lockable position 28 comes in contact with the contact portion (i.e., inclined face 42a) of the locking member 38 before the locking member 38, provided on the body side of the image forming apparatus, is engaged with the lockable position 28 formed on the rotary 13 side. Accordingly, the movement of the rocking member 38 is synchronized with the rotation of the rotary 13 so that the engagement between the locking member 38 and the lockable portion 28 is achieved at the same time that the rotary 13 reaches the predetermined position for the positioning.

As disclosed in Nukui, in the developing rack 80 and a rotary disk 81, which are rotationally driven by a motor 90, a locking lever 91 restrains respective pins 82Y, 82M, 82C, 82Bk, to lock each developing position. Nukui, however, only discloses a case that the locking lever 91 and the pins 82Y, 82M, 82C, 82Bk, are directly engaged with each other and does not disclose that the pins come in contact with the locking lever 91, respectively, before the locking lever 91 is engaged with the pins by the rotation of the rotary.

Accordingly, Applicant submits that claim 6 is patentable over the Nukui reference, and respectfully requests the Examiner to reconsider and withdraw the rejection.

B. Claim 9/6

Since claim 9/6 is dependent upon claim 6, Applicant submits that such claim is patentable at least by virtue of its dependency.

V. Rejections under 35 U.S.C. § 103(a) in view of Nukui and U.S. Patent No. 5,471,292 to Okazawa (“Okazawa”)

The Examiner has rejected claims 7 and 9/7 under 35 U.S.C. § 103(a) as allegedly being unpatentable over Nukui in view of Okazawa. However, since claims 7 and 9/7 are dependent upon claim 6, and Okazawa fails to cure the deficient teachings of Nukui, in regard to claim 6, Applicant submits that claims 7 and 9/7 are patentable at least by virtue of their dependency.

VI. Rejections under 35 U.S.C. § 103(a) in view of Nukui and U.S. Patent No. 5,585,911 to Hattori et al. (“Hattori”)

The Examiner has rejected claims 8 and 9/8 under 35 U.S.C. § 103(a) as allegedly being unpatentable over Nukui in view of Hattori. However, since claims 8 and 9/8 are dependent upon claim 6, and Hattori fails to cure the deficient teachings of Nukui in regard to claim 6, Applicant submits that such claims are patentable at least by virtue of their dependency.

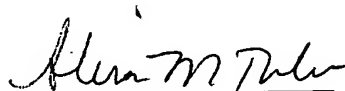
VII. Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

Amendment under 37 C.F.R. § 1.111
U.S. Application No. 10/650,048

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



Allison M. Tulino
Registration No. 48,294

SUGHRUE MION, PLLC
Telephone: (202) 293-7060
Facsimile: (202) 293-7860

WASHINGTON OFFICE

23373

CUSTOMER NUMBER

Date: February 22, 2005